Appendix 4 - Executive Summary – Key Route Network Monitoring Framework

The West Midlands Key Route Network (KRN) is a 605km network, made up of 23 routes, that covers the entire West Midlands region. The KRN represents approximately 7% of all the roads within the West Midlands Local Authority network and carries approximately 50% of all car, public transport and freight journeys. A number of region wide policy documents highlight a clear need for KRN monitoring to demonstrate that the investments made are making the network operate as effectively and safely as possible.

In order to baseline current capability and identify where improvements are needed, KRN monitoring requirements have been defined by IBI Group through close engagement with TfWM. Six key monitoring areas have been defined through this process; collisions, congestion, asset condition, roadworks, preventable disruption and future impact. We have undertaken a review of the existing data use and monitoring capability through consultation with TFWM's data innovation team. This review has highlighted that current capabilities do not fully align with the requirements for KRN monitoring, with key gaps in time and space.

We have defined a KRN subset, made up of six of the KRN routes, which will allow the proposed monitoring capability to be tested on a smaller scale, before being implemented across the KRN.

Having defined the KRN monitoring requirements and gained a high level understanding of the datasets available currently available to TfWM, we have conducted a gap analysis. This analysis has highlighted six problem areas where there are significant gaps between requirements and capability, these are:

1. Data alignment to the KRN;
2. Congestion data;
3. Real time data;
4. Preventable disruption data;
5. Data availability in one location, and
6. Reliance on local authorities.

Where it is deemed feasible we have proposed specific metrics which can be used to fill these gaps. The approach has considered the likely benefits from monitoring such metrics, the ease with which TfWM will be able to obtain at regular intervals suitable data, and how effectively TfWM can influence change in such areas. The analysis indicates TfWM's initial KRN monitoring should be focused around a limited number of monitoring areas with capability being built up over a 12 month period, these initial areas are:

1. Mapping existing collision data through CRASH (Collison Reporting And SHaring, the DfT's reporting system) to individual KRN routes and the KRN as a whole, so that incident hotspots are easily identified;
2. Utilising more of the currently available Congestion data sources to facilitate real-time identification of major congestion events. This can then be used as a basis to understand what additional data will be required to report at the KRN route or network level;
3. Ensuring that roadworks APIs (Application Programme Interface) are run consistently (i.e. daily) and spreadsheets are fully kept up to date, or that all local authorities fully utilise the Elgin platform to enable visibility of all roadworks/ planned works data, as well as future events, in an accurate and consistent manner to assist contingency planning where necessary, and;
4. Information for other modes, namely Metro and rail, should be a priority at this stage only where it is likely to have subsequent impacts on the road network, for example disruption on a line resulting in more people using buses as a replacement service.